

The Lightweight Alternative

puts strength where it counts



FirmaCoreTM
Lightweight Carriers



Reduce your costs, weight and waste with new FirmaCore™ carriers.

Traditional pallets have carried drawbacks for decades, especially when they're used to support corrugated boxes and trays of lightweight products. They increase your shipping costs, add disposal costs and can pile up in landfills. If not properly maintained, they can cause damage to the products they're supposed to protect. Old-school pallets are even prohibited by some countries and companies because wood-boring parasites love to travel in them. Now, Sonoco is redefining transport packaging with a cleaner, greener carrier designed to cut the expense of shipping lighter-weight loads.



Basic questions. Simple solutions.

Creating FirmaCore carriers started first with questions: Is it feasible to make a new transport carrier that's strong in the exact places needed versus heavy and cumbersome pallets? Could we base our designs on pillars of high-strength, recyclable fiber cores, that could be positioned to fulfill customer-specific product stacking needs? Finally, could this next generation of transport packaging solutions be lighter, cleaner and greener, reflecting Sonoco's commitment to sustainability? As we applied more than a century of packaging design, materials science and engineering, our answers moved from "Possibly" to "Probably" to a resounding "Yes!"

Cut expenses. Save time.

Choosing FirmaCore carriers can greatly reduce your costs in many areas. They will significantly lower your initial purchase costs compared to traditional heat-treated or fumigated pallets, and eliminate slip sheets from your supply chain. ISPM 15*-exempt FirmaCore carriers don't host wood-boring parasites so they require no additional fumigation or heat treatment. That saves you time and money.

† On average, every 2,000 pounds of freight weight reduction equals a 1% fuel savings. The average tractor trailer mileage of 6.2 mpg would increase to 6.26 mpg.

Reduce weight. Curtail injuries.

The FirmaCore carrier is 75 percent lighter than a traditional pallet, weighing less than nine pounds. That makes moving, loading and storing products easier and faster. Created specifically for one-way, lightweight shipments, FirmaCore carriers give you a strong, safe, low-cost, green alternative. Lighter loads also cut fuel consumption and carbon emissions, reducing your outbound freight costs by an average of more than one percent.†



FirmaCore carriers hold up to 1,000 pounds each and offer several core placement designs.

Because FirmaCore carriers are so lightweight, they can help you reduce reportable back and hand injuries. Eliminating nails and splinters ensures a cleaner and safer work environment.

Reduce waste. Add earnings.

FirmaCore carriers are made with post-consumer waste from Old Corrugated Containers (OCC) and are 100 percent recyclable so they don't squander resources. Nail- and splinter-free, they help prevent damage and product loss as your goods are being shipped and stored. They also cut the time your company wastes sorting, storing and cleaning up after wood pallets.

You'll appreciate the dollars you can *save* on landfill fees, and *earn* by recycling used FirmaCore carriers. Over the last ten years, companies have been collecting between \$50 and \$100 per ton for OCC. Compare that to the \$1.50 you might pay a landfill to dispose of each traditional pallet weighing 40-plus pounds.

Strength only where it counts.

Low-cost FirmaCore carriers will hold up to 1,000 pounds per carrier. They are ideal for lightweight, fast-moving, one-way shipments, so they were not designed to be used in open racking systems. Engineered for standard four-way entry with fork trucks, FirmaCore carriers are also designed for stability and ease of use with pallet jacks.

They're perfect for:

- **Pharmaceuticals**
- **Lightweight, Fast Moving Consumer Goods (FMCG)**
- **Confectionery products**
- **Lightweight export products**

To learn more about how FirmaCore carriers can reduce your cost, weight and waste, click or call:

sonocotranspack.com

888/875-8754

Sonoco Transport Packaging

The FirmaCore carrier brand is just one of a full line of innovative transport packaging solutions available from Sonoco. Always engineered with strength, stability and sustainability in mind, Sonoco packaging has been meeting its customers' changing needs for more than a century, delivering real value to the application, improved bottom-line performance and smart use of the earth's renewable resources.



Over the last ten years, companies have collected between \$50 and \$100 per ton for Old Corrugated Containers (OCC).



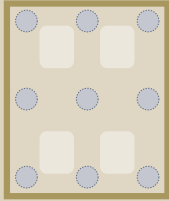
Engineered for standard four-way entry with fork trucks, FirmaCore carriers are also designed for stability and ease of use with pallet jacks.



FirmaCore[™]
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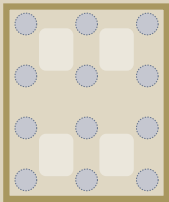
FirmaCore carriers technical information

Available in the following standard core-placement designs:



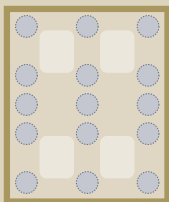
9-core

Can hold up to 600 lbs. (272kg) per carrier; 1,200 lbs. (544kg) when stacked two high. Carrier weighs 8 lbs. (3.7kg).



12-core

Can hold up to 800 lbs. (363kg) per carrier; 2,400 lbs. (1,089kg) when stacked three high. Carrier weighs 8.5 lbs. (3.9kg).



15-core

Can hold up to 1,000 lbs. (454kg) per carrier; 4,000 lbs. (1,814kg) when stacked four high. Carrier weighs 9 lbs. (4.1kg).

Custom sizes are also available.

* *Guidelines for Regulating Wood Packaging in International Trade, known as the International Plant Protection Convention, ISPM 15, are a regulation, backed by the United Nations, and designed to address the global spread of timber pests and disease by regulating the movement of unprocessed raw timber packaging, pallets and dunnage materials. Most pallets shipped across national borders must be made of materials that do not contain invasive species of insects and plant diseases. Wood pallets must be treated by either heat or chemical fumigation to be compliant.*

Benefits of switching to FirmaCore carriers

LIGHTER to reduce weight and waste

- 75% lighter than wood pallets.
- Significantly reduces freight costs on outbound shipments.
- Lighter carrier is safer for lifting.

ENGINEERED to reduce costs and delays

- Designed to absorb the shock of loads and prevent damage to goods.
- ISPM 15 exempt; accepted by countries and companies that prohibit wood pallets.*
- Not a host to wood-boring parasites.

STRENGTH only where it counts

- Holds up to 1,000 pounds each.
- Strategic core configuration.

RECYCLABLE to save money and resources

- 100% recyclable, made from corrugated materials; historically, Old Corrugated Containers (OCC) have sold for \$50-\$100 per ton.
- Carrier decomposes easily.

Reduce solid waste

- Only about 10% of wood products are recycled while over half of all paper products are recycled. Switching to FirmaCore carriers reduces your solid waste contribution more than four fold.